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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,414	03/22/2007	Simon William Barker	NOVE-110US	7564

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EXAMINER	
LIN, KUANG Y	

ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,414	BARKER ET AL.	
	Examiner	Art Unit	
	Kuang Y. Lin	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-14 and 16-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-14 and 16-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/31/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3-5, 7-10, 13, 14, 16-18, 20-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,581,675 to Harrington and further in view of US 2004/0045696 to Marti et al. Harrington substantially shows the invention as claimed except that he does not show the roughness of the belt surface. However, Marti et al. show (see, for example, [0021]) that it is desirable to provide a casting surface having a surface roughness of less that 1 micrometer to obtain a strip having a better surface quality. It would have been obvious to provide the roughness of belt surface of

Harrington with less than 1 micrometer in view of Marti et al. to form a cast strip having a better surface quality.

4. Claims 11, 12, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,581,675 to Harrington in view of US 2004/0045696 to Marti et al. as applied to claim 1 above and further in view of US 5,636,681 to Sulzer et al. Sulzer et al. show to provide a parting agent removing means and applying means for removing the used parting agent and applying a fresh coating onto the casting belt to prevent the formation of surface blemishes and defects on the cast metal strip product. It would have been obvious to provide the parting agent removing means and applying means of Sulzer et al. for the casting apparatus of Harrington in view of the advantage.

5. Claims 1, 3-10, 13, 14, 16-24 and 27 are provisionally rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's copending application S.N. 10/574,459 in view of US 6,581,675 Harrington and US 2004/0045696 to Marti et al. The treatments of Harrington and Marti et al. are the same as supra. The Copending application '459 substantially shows the invention as claimed except that it does not show to provide grooves with specific roughness as claimed on the casting belt. It would have been obvious to provide the longitudinal grooves of Harrington with the specific surface roughness of Marti et al. on the belt of application '459 to facilitate the casting process.

6. Claims 11, 12, 25 and 26 are provisionally rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's copending application S.N. 10/574,459 in view of US 6,581,675 Harrington, US 2004/0045696 to Marti et al and US 5,636,681 to Sulzer et al. The treatments of Harrington, Marti et al. and Sulzer are the same as supra. The Copending application '459 substantially shows the invention as claimed except that it does not show to provide grooves with specific roughness as claimed on the casting belt and does not show to provide parting agent removing means and applying means. It would have been obvious to provide the longitudinal grooves of Harrington with the specific surface roughness on the belt and to provide the parting agent removing means and applying means of Sulzer et al. for the belt of application '459 to facilitate the casting process.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 3-10, 13, 14, 16-24 and 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/574,459 and further in view of US 6,581,675 to Harrington and US 2004/0045696 to Marti et al. The treatments of Harrington and Marti et al. are the same as supra. Although the conflicting claims between the instant application and that of Application No. 10/574,459 are not identical, they are not patentably distinct from each other because the Copending application '459 substantially shows the invention as claimed except that it does not show to provide grooves with specific roughness as claimed on the casting belt. It would have been obvious to provide the longitudinal grooves of Harrington with the specific surface roughness of Marti et al. on the belt of application '459 to facilitate the casting process.

9. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 11, 12, 25 and 26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/574,459 in view of US 6,581,675 Harrington, US 2004/0045696 to Marti et al and US 5,636,681 to Sulzer et al. The treatments of Harrington, Marti et al. and Sulzer are the same as supra. The Copending application '459 substantially shows the invention as claimed except that it does not show to

provide grooves with specific roughness as claimed on the casting belt and does not show to provide parting agent removing means and applying means. It would have been obvious to provide the longitudinal grooves of Harrington with the specific surface roughness of Marti et al. on the belt and to provide the parting agent removing means and applying means of Sulzer et al. for the belt of application '459 to facilitate the casting process.

This is a provisional obviousness-type double patenting rejection.

11. Applicant's arguments filed March 31, 2008 have been fully considered but they are not persuasive.

a. Applicant in page 9, last para. of the response stated that if Harrington was using two prior references (i.e. US 4,934,443 and WO 97/14520) as a guide for grooving the casting surface, he would not have contemplated a surface roughness in the range as claimed. However, it is a common knowledge that the surface roughness of the belt affects the heat transfer between the molten metal and the belt. The surface roughness of the belt also determines the smoothness of the cast strip. It would have been obvious for those of ordinary skill in the casting art to provide the grooved belt of Harrington with the surface roughness of less than 1 micrometer as taught by Marti et al. such that to obtain a cast strip with a smooth surface.

b. Applicant in junction para. between pages 10 and 11 of the response stated that it appears that the statement regarding surface roughness applied to

layer A and the surface is prepared through grit blasting or laser roughness. However, Marti et al. in [0021] clearly refers to figure 3 which show a **cylindrical surface**, rather than figure 2. The **cylindrical surface** is prepared through grinding or turning process, rather than by grit blasting or laser roughness as mentioned in [0015]. **The turning process will produce a grooved structure**.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 571-272-1179. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kuang Y. Lin/
Primary Examiner, Art Unit 1793

5-6-08